REMARKS

The following is intended as a full and complete response to the Office Action dated July 19, 2007. Claims 1-28 were examined. Claims 1-21 are rejected under 35 U.S.C. § 102(e) as being unpatentable over Nishikado, et al. (US Pub No. 2003/0188013 A1). Claims 22-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishikado (US Pub No. 2003/0188013 A1) in view of Craft (US Pub No.2002/0091844 A1). By way of this reply, Applicants are canceling claims 3 and 9, amending claims 1, 2, 4-7, 10-12, 15, 17, 18, 20-23, and 25-26, and adding new claims 29 and 30.

Rejections Under 35 U.S.C. § 102(e)

Claim 1 is amended to recite the limitations of (i) parsing the first frame to extract TCP payload data and (ii) uploading the TCP payload data to a memory. As shown in Figure 4B and described in paragraph [0056] of the present application, the offload unit is configured to parse the frames received for a connection to extract payload data that is uploaded to memory.

Nishikado fails to teach or suggest the limitations of parsing a frame to extract TCP payload data and uploading the TCP payload data to a memory. Nishikado describes a data communication system configured to queue and forward data communications between clients and servers. Specifically, Nishikado describes forwarding and load balancing requests at an HTTP level rather than at the TCP level. In paragraph [0093], Nishikado teaches that the connection forwarding processing unit extracts destination information from a request, and in paragraph [0099], Nishikado teaches that the request is forwarded to the server. Nowhere does Nishikado describe extracting TCP payload data from a request and uploading the TCP payload data to memory. Therefore, amended claim 1 and claims 2, 4-8, and 10-14 that depend from amended claim 1 are patentable over Nishikado.

Additionally, claim 2 is amended to include the limitation of claim 3, and claim 3 is cancelled. Claims 4 and 5 are amended to conform with amended claim 1. Claim 6 is amended to clarify the limitation that the legacy buffer is in a portion of the memory that is allocated to a driver, as described in paragraph [0051] and shown in Figure 5C of the present application. Claim 7 is amended to clarify the limitation that the third frame is uploaded to a legacy buffer as shown in Figure 4B and described in [0056] of the present application. Claim 9 is cancelled. Claim 10 is amended to clarify the limitations of the legacy buffer and the user

buffer. The user buffer is shown in Figure 5A and described in paragraph [0052] of the present application. Claim 10 is also amended to include the limitation that the payload data is uploaded to the legacy buffer when a user buffer is not available, as shown in steps 427 and 430 of Figure 4B and described in paragraph [0056] of the present application. Rather than waiting for a user buffer to become available, the offload unit uploads payload data for delegated connections to a legacy buffer, minimizing the need to buffer the payload data within the offload unit. Claims 11 and 12 are amended to depend from claim 8. Claims 2, 4-8, and 10-14 depend from allowable claim 1 and are therefore patentable over Nishikado.

Claim 15 is amended to recite the limitation of a connection data portion of a delegated connection table that stores an expected sequence number, an acknowledgment number, timestamp data, and a count of unACKnowledged frames. The connection data portion of the delegated connection table is shown in Figure 7 and described in paragraph [0092] of the present application.

With respect to amended claim 15, Nishikado fails to teach or suggest that the delegated connection table stores an expected sequence number, an acknowledgment number, timestamp data, and a count of unACKnowledged frames. As shown in Figure 4 of Nishikado and described in paragraph [0080], the disclosed delegated connection table stores a destination field, a next hop, a maximum connection number field a connection number field, a maximum queueing number field, a maximum wait time field, a maximum wait frequency field, a request queue, and priority token updating condition information. None of the fields in Nishikado's delegated connection table store an expected sequence number, an acknowledgment number, timestamp data, and a count of unACKnowledged frames as recited in amended claim 15. Therefore, amended claim 15 and claims 16-21 that depend from amended claim 15 are patentable over Nishikado.

Additionally, claim 17 is amended to clarify the limitation that the user buffer information includes a user buffer address and length, as shown in Figure 5B and described in paragraph [0064] of the present application. Claim 18 is amended to clarify that a request buffer flag is set in the delegated connection table to request a user buffer, as described in paragraph [0107]. Claim 20 is amended to clarify the limitation that the legacy buffer is in a portion of the memory that is allocated to a driver, as described in paragraph [0051] and shown in Figure 5C of the present application.

Rejections Under 35 U.S.C. § 103(a)

Claim 22 is amended to recite the limitations of (i) storing a user buffer length and address and (ii) a connection data portion of a delegated connection table that stores an expected sequence number, an acknowledgment number, timestamp data, and a count of unACKnowledged frames, as described in [00145] of the present application. The user buffer address and length is shown in Figure 5B and described in paragraph [0064] of the present application.

As previously described, Nishikado fails to teach or suggest that the delegated connection table stores an expected sequence number, an acknowledgment number, timestamp data, and a count of unACKnowledged frames. Nishikado also fails to teach or suggest a user buffer, user buffer address, and user buffer length. Furthermore, Nishikado fails to teach that the delegated connection table is divided into the first and second storage units. Therefore, the Examiner relies on Craft for the teaching of the first and second storage units. In paragraph [0058], Craft describes a storage unit 70 that is located outside of the offload unit (INIC) and configured to store data, not delegated connection information. In particular, Craft does not teach or suggest storing delegated connection information, including expected sequence number, an acknowledgment number, timestamp data, and a count of unACKnowledged frames in a first storage resource and storing a user buffer address and user buffer length in a second storage resource. Therefore, amended claim 22 and claims 23-28 that depend from amended claim 22 are patentable over the combination of Nishikado and Craft.

In addition to the foregoing, claim 23 is amended to clarify that the connection identification information includes a destination IP address, a source IP address, a source TCP port, and a destination TCP port. As previously explained, Nishikado fails to describe using a TCP protocol and Craft fails to teach or suggest storing connection identification information in a third storage resource. Claim 25 is amended to clarify that the transmit engine performs output frame processing. Claim 26 is amended to clarify that the receive engine parses incoming frames and determines whether or not the incoming frames are valid.

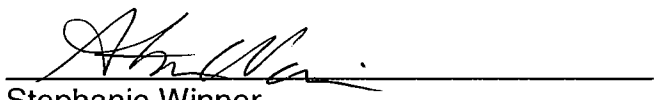
New Claims 29 and 30

New claims 29 and 30 include the limitations of modifying/updating of connection state data includes clearing an unACKnowledged count, updating the ACK number with a last ACKnowledged number, and updating the expected sequence number with an incremental sequence number, as described in [00145] of the present application. Neither Nishikado nor Craft teach or suggest these specific limitations. Therefore, claims 29 and 30 are patentable over those references. Furthermore, claim 29 depends from allowable claim 1 and claim 30 depends from allowable claim 15.

CONCLUSION

Based on the above remarks, Applicants believe that they have overcome all of the rejections set forth in the Office Action mailed on July 19, 2007 and that the pending claims are in condition for allowance. If the Examiner has any questions, please contact the Applicant's undersigned representative at the number provided below.

Respectfully submitted,



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Notice of References Cited	Application/Control No. 10/875,013 P001148	Applicant(s)/Patent Under Reexamination NANDA ET AL.	
	Examiner Pao Sinkantarakorn	Art Unit 2616	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2003/0158906	08-2003	Hayes, John W. ✓ B60 ✓1157 ✓859	709/211
*	B	US-7,254,637	08-2007	Pinkerton et al.	709/230
*	C	US-2007/0064724	03-2007	Minami et al.	370/463
	D	US- 2004 0158793	8-2004	Blightman et al	
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Thanks'
Stephanie

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*	A	~~US-5,937,189~~	~~08-1999~~	~~Connery et al.~~ √859 √860	709/250
*	B	US-6,757,248	06-2004	Li et al.	370/235
*	C	~~US-6,996,070~~	~~02-2006~~	~~Starr et al.~~ √860 √859	370/252
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